

CLAIMS

We claim:

- 5 *See Fig 1*
1. A method for analyzing and planning an inventory according to a business objective using computer software, the inventory having related inventory data stored in a computer memory, the method comprising the steps of:
- 10 analyzing the inventory data to identify a characteristic of the data; configuring via a user interface a plurality of rules for generating a stocking plan in accordance with the business objective and the characteristic; generating the stocking plan using the plurality of rules; and evaluating the stocking plan in relation to the business objective.
- 15 2. The method of claim 1, wherein each of the plurality of rules is selectively enabled and disabled via the user interface.
3. The method of claim 2, wherein a pointing device is used to selectively enable and disable the plurality of rules.
- 20 4. The method of claim 3, wherein the pointing device is one of a computer mouse, a track ball, a touchpad, a pointing stick, and an electronic pen.
5. The method of claim 1 wherein the user interface is a graphical user interface.
- 25 6. The method of claim 1 wherein the user interface is displayed via a web browser.
7. The method of claim 2, wherein the user interface includes selection areas for selectively enabling and disabling the plurality of rules.
8. The method of claim 7, wherein the selection areas are defined by a user interface control.
9. The method of claim 8, wherein the user interface control is one of a check box, a radio button, and a push button.
- 30 10. The method of claim 1, wherein parameters for each of the plurality of rules are defined via the user interface.

11. The method of claim 1, further comprising the steps of:
selectively adjusting via a user interface the plurality of rules in
accordance with the business objective; and
repeating the generating step and the evaluating step.
12. The method of claim 1, further comprising the step of:
repeating the analyzing, configuring, generating, and evaluating steps
as necessary to update the stocking plan.
13. The method of claim 1, wherein the stocking plan identifies at least one
inventory item to be stocked and a quantity to be stocked for each inventory item.
14. The method of claim 1, wherein the stocking plan identifies at least one
inventory item not to be stocked.
15. The method of claim 1, further comprising the steps of:
reviewing the stocking plan via a web browser on a remote computer;
and
providing input related to the stocking plan via the web browser.
16. The method of claim 1, wherein the plurality of rules includes at least
one rule relating to each of a business environment of the inventory, a supplier of the
inventory, a demand for an item in the inventory, and an item in the inventory.
17. The method of claim 1, wherein the user interface is accessed via a
global communications network.
18. The method of claim 1, wherein the stocking plan includes a pictorial
representation of the stocking plan.
19. A method for analyzing and planning an inventory according to a
business objective using computer software, the inventory having related inventory
data stored in a computer memory, the method comprising the steps of:
selecting via a user interface a first group of the inventory data
according to a first criterion;
generating a first stocking plan using the first group of the inventory
data;
selecting via the user interface a second group of the inventory data
according to a second criterion;
generating a second stocking plan using the second group of the

inventory data; and

selecting one of the first stocking plan and the second stocking plan in accordance with the business objective.

20. The method of claim 19, wherein the first criterion is a first time period and the second criterion is a second time period.

21. The method of claim 20, wherein the first time period is a first month and the second time period is a second month.

22. The method of claim 20, wherein the first time period and the second time period each comprise a plurality of days.

23. The method of claim 19, wherein the first criterion and the second criterion are related to the inventory.

24. The method of claim 19, wherein the first criterion and the second criterion are related to a business unit of the inventory.

25. The method of claim 19, wherein the first criterion and the second criterion are related to a location of the inventory.

26. The method of claim 19, further comprising the step of displaying the first stocking plan and the second stocking plan on the user interface.

27. The method of claim 26, wherein the first and second stocking plans are displayed side by side on the user interface.

28. A method for analyzing and planning an inventory in accordance with at least one business objective using computer software, the inventory having related inventory data and a plurality of rules stored in a computer memory, the method comprising:

generating a plurality of stocking plans based on the inventory data and the plurality of rules; and

selecting an optimum stocking plan from the plurality of stocking plans based on the at least one business objective.

29. The method of claim 28, wherein at least one of the rules is different for each of the stocking plans.

30. The method of claim 28, wherein the inventory data is different for each of the stocking plans.

31. The method of claim 28, wherein the plurality of stocking plans is

displayed via a user interface.

32. The method of claim 31, wherein the plurality of stocking plans are displayed side by side on the user interface.

5 33. A method for analyzing and planning an inventory according to a business objective using computer software, the inventory having related inventory data stored in a computer memory, the method comprising the steps of:

performing via a user interface a plurality of steps, the plurality of steps including selecting a business objective, selecting a group of the inventory data based on a predetermined criterion, selecting a method of generating the stocking plan, selecting at least one rule for generating the stocking plan, and configuring the at least one rule for generating the stocking plan;

10 executing the selected method using the selected business objective, the selected group of data and the selected rules to generate a first stocking plan;

15 changing via the user interface one of the selected method, business objective, group of data, and rules;

generating a second stocking plan; and

selecting one of the first stocking plan and the second stocking plan in accordance with the business objective.

20 34. The method of claim 33, wherein the user interface is a graphical user interface.

35. The method of claim 33, wherein the user interface is accessed via a global communications network.

36. The method of claim 33, further comprising the step of displaying the first stocking plan and the second stocking plan on the user interface.

25 37. The method of claim 36, wherein the first stocking plan and the second stocking plan are displayed side by side on the user interface.

38. A method for generating a stocking plan for an inventory in accordance with at least one business objective using computer software, the inventory having related inventory data, the method comprising the steps of:

30 receiving the inventory data from at least one remote data source;

storing the inventory data in a computer memory;

defining a plurality of rules based on the inventory data and the at least

one business objective, the plurality of rules comprising:

at least one rule related to a business environment of the inventory;

at least one rule related to the inventory;

at least one rule related to a demand for the inventory;

at least one rule related to a supplier of the inventory; and

generating a stocking plan in accordance with the plurality of rules.

39. The method of claim 38, wherein the at least one rule related to a business environment includes a rule related to a financial objective.

40. The method of claim 38, wherein the at least one rule related to a business environment includes a rule related to a company mission.

41. The method of claim 38, wherein the at least one rule related to a business environment includes a rule related to a service level.

42. The method of claim 38, wherein the at least one rule related to a business environment includes a rule related to inventory turns.

43. The method of claim 38, wherein the at least one rule related to the inventory includes a rule related to an availability of an item in the inventory.

44. The method of claim 38, wherein the at least one rule related to the inventory includes a rule related to a quantity of a item in the inventory.

45. The method of claim 38, wherein the at least one rule related to the inventory includes a rule related to a location of an item in the inventory.

46. The method of claim 38, wherein the at least one rule related to a demand for the inventory includes at least one rule related to the demand history of an item in the inventory.

47. The method of claim 38, wherein the at least one rule related to a demand for the inventory includes at least one rule related to a demand forecast.

48. The method of claim 38, wherein the at least one rule related to a demand for the inventory includes at least one rule related to a package quantity for an item in the inventory.

49. The method of claim 38, wherein the at least one rule related to a supplier of the inventory includes at least one rule related to the supplier's lead time.

50. The method of claim 38, wherein the at least one rule related to a

supplier of the inventory includes at least one rule related to the supplier's order policies.

5 51. The method of claim 38, wherein the at least one rule related to a supplier of the inventory includes at least one rule related to the supplier's package quantities.

52. The method of claim 38, wherein the at least one rule related to a supplier of the inventory includes at least one rule related to the supplier's cost.

53. A method for analyzing and planning an inventory to meet at least one overall business objective, the inventory having inventory data, a plurality of rules, and at least one stocking plan related to the overall objective, the inventory data, plurality of rules, and at least one stocking plan stored on a main computer coupled to a global communications network, the method comprising the steps of:

accessing one of the inventory data, the plurality of rules and the stocking plan on the main computer from a remote computer;
15 reviewing via a web browser on the remote computer the one of the inventory data, the plurality of rules, and the stocking plan;
creating via the web browser a message relating to the one of the inventory data, the plurality of rules, and the stocking plan; and
transmitting the message from the remote computer to the main
20 computer.

54. The method of claim 53, further comprising the step of transmitting the message to a second remote computer.

55. The method of claim 54, further comprising the step of determining whether to display the message to a user of the second remote computer.

25 56. A system for analyzing and planning an inventory having related inventory data and a related business objective, the system comprising:
means for receiving the inventory data from a remote data source;
means for storing the inventory data;
means for analyzing the inventory data via a user interface to determine
30 a characteristic of the inventory data;
means for configuring rules based on the characteristic and the business objective;

means for generating a stocking plan in accordance with the rules, the characteristic, and the business objective; and

means for evaluating the stocking plan.

5 57. A method for storing inventory data for use in a computer system for inventory analysis and planning, the method comprising the steps of:

receiving inventory data from a remote data source;

grouping the inventory data according to business, inventory, demand and supply criteria; and

storing the grouped data in a computer memory.

10 58. The method of claim 57, further comprising the step of: indexing the inventory data according to one of an item identifier, a time period, and a user identifier.

59. The method of claim 57, further comprising the step of indexing the inventory data according to an item identifier, a time period, and a user identifier.

15 60. The method of claim 57, wherein the computer memory includes a database.

61. The method of claim 58, wherein the database includes one of a multidimensional database, a data mart, and a data warehouse.

20 62. A system for storing inventory data for use in a computer system for inventory analysis and planning, the system comprising:

means for receiving inventory data;

means for grouping the inventory data according to business, inventory, demand and supply criteria; and

means for storing the grouped data in a computer memory.

25 63. The system of claim 62, further comprising means for indexing the inventory data according to one of an item identifier, a time period, and a user identifier.

64. The system of claim 62, further comprising means for indexing the inventory data according to an item identifier, a time period, and a user identifier.

30 65. A method for analyzing inventory data in accordance with a preselected business objective to generate a stocking plan for an inventory using computer software, the method comprising the steps of:

creating a plurality of solution paths, wherein each solution path comprises a subset of the inventory data, a first plurality of rules for analyzing the subset of the inventory data, and a second plurality of rules for generating the stocking plan;

5 testing the plurality of solution paths on the subset of the inventory data by generating a plurality of stocking plans;

comparing the plurality of stocking plans to the preselected objective; and

10 storing a solution path that generated an optimum stocking plan relative to the preselected objective.

66. The method of claim 65, further comprising the step of:
associating a solution path with an end user.

67. A method for analyzing and planning an inventory according to a business objective using computer software having a user interface, the inventory having related inventory data stored in a computer memory, the method comprising the steps of:

15 selecting via the user interface a group of inventory data from the inventory data stored in the computer memory;

storing the group of inventory data in a database;

20 selectively enabling via the user interface a plurality of rules for analyzing the group of inventory data;

executing the plurality of selectively enabled rules for analyzing the group of inventory data to generate a display of the group of inventory data;

25 analyzing the display of the group of the inventory data via the user interface to identify a characteristic of the group of the inventory data;

selectively enabling via the user interface a plurality of rules for generating a stocking plan in accordance with the business objective and the characteristic;

30 executing the plurality of selectively enabled rules for generating a stocking plan to generate the stocking plan;

selectively enabling via the user interface a plurality of rules for evaluating the stocking plan;

